

REMARKS

This Amendment responds to the Office Action mailed October 31, 2005 and is filed contemporaneously with a Request for Continued Examination and a request for a three-month extension of time.

Claims 2-16 were pending in the application. Claim 2 is amended to more particularly recite the present invention. New claims 17-21 are added. No new matter is added by the amendments and new claims. Thus, claims 2-21 are now pending for reconsideration.

Applicant thanks the Examiner for considering the Information Disclosure Statement mailed on July 5, 2005.

Summary of the Office Action

In the Office Action, claims 2, 3 and 10-15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2002/0188790 to Park et al. ("Park"), claims 4-7 and 9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Park in view of U.S. Patent No. 6,192,399 to Goodman ("Goodman"), claim 8 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Park in view of Goodman and further in view of U.S. Patent No. 6,862,353 to Rabenko et al. ("Rabenko"), and claim 16 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Park in view of U.S. Patent No. 6,118,793 to Chen ("Chen"). The rejections are respectfully traversed based upon the foregoing amendment and the following remarks.

Response to the rejections

In the office action, the Park reference is characterized as providing "communication over a single twisted wire pair (270)." However, this statement mischaracterizes the teachings of Park. In fact, the two transmission paths, 372 and 374, that are grouped together as path 270 in Fig. 3 of Park, are each twisted wire pairs. As explained in Park, the communication path 270 is in fact "a pair of 2-wire signal lines." Park, para. [0027], [0034]. A careful read of Park makes clear that the term "signal line" refers consistently to a "2-wire signal line." This description in Park is supported by Fig.

3 itself, which shows two wires (TX+ and RX+) being connected to signal line 372 and two wires (TX- and RX-) being connected to signal line 374. This connection is described in paragraph [0046], so it is clear that TX+ and RX+ from one PHY are each connected to the respective terminals in the connected PHY. It should be noted that the figures in Park also show four-wire and eight-wire signal lines using a single line in the figure (see, e.g., 30, 250, 260 in figures 1-3). Thus, the fact that signal lines 372 and 374 are each shown as a single line in the figures does not alter the teaching of Park that these are actually “2-wire signal lines.”

In contrast to Park, the preamble of amended claim 2 recites the communication path as “being a single twisted wire pair.” Since the preamble provides the antecedent basis for “path” in the claim, the preamble should be construed as being an element of the claim. Thus, amended claim 2 is limited to a “single” twisted wire pair communication path (i.e., no more than one twisted wire pair).

Since Park fails to disclose transmission of data over a single twisted wire pair, Applicant submits that Park fails to anticipate amended claim 2. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 2 under 35 U.S.C. § 102(e). Further, since claims 3 and 10-15 depend from claim 2, Applicant also respectfully requests withdrawal of the rejections of claims 3 and 10-15 under 35 U.S.C. § 102(e) for at least the same reasons.

Further, since claims 4-7 and 9 depend from claim 2, which is allowable over Park, and the Goodman reference fails to cure the deficiency in Park with respect to claim 2 identified above, Applicant submits that these claims are allowable for at least the same reasons as stated above. Accordingly, Applicant respectfully requests withdrawal of the rejections of claims 4-7 and 9 under 35 U.S.C. § 103(a).

Further, since claim 8 ultimately depends from claim 2, which is allowable over Park, and neither the Goodman reference nor the Rabenko reference cures the deficiency in Park with respect to claim 2 identified above, Applicant submits that this claims is

allowable for at least the same reasons as stated above. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 8 under 35 U.S.C. § 103(a).

Further, since claim 16 depends from claim 2, which is allowable over Park, and the Chen reference fails to cure the deficiency in Park with respect to claim 2 identified above, Applicant submits that claim 16 is also allowable for at least the same reasons as stated above with respect to claim 2. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 16 under 35 U.S.C. § 103(a).

New Claims

New claims 17-21 merely apply the elements recited in dependent claims 4, 5, 7, 9, 10 and 15 to different base claims, and therefore are fully supported by the specification. Specifically: new claim 17 recites the elements of claim 4 depending from claim 3; new claim 18 recites the elements of claim 5 depending from claim 17; new claim 19 recites the elements of claims 7 and 9 depending from claim 18; new claim 20 recites the elements of claim 10 depending from claim 19; and new claim 21 recites the elements of claim 15 depending from claim 20. Applicant respectfully submits that new claims 17-20 are also allowable for at least the same reasons as claim 3 from which they depend.

Conclusion

In view of the above amendments and remarks, Applicant respectfully requests that all objections and rejections be withdrawn and that a notice of allowance be forthcoming. The Examiner is invited to contact the undersigned for any reason related to the advancement of this case.

Date: April 26, 2006

**Hansen Huang Technology Law
Group, LLP**
1725 Eye St., NW, Suite 300
Washington, D.C. 20006
Telephone: 202-465-3294
Facsimile: 202-349-3915
E-Mail: robert.hansen@H2TLG.com

Respectfully submitted,



Robert M. Hansen
Attorney for Applicant
Reg. No.: 43,656

Customer No. 61275